

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
15201

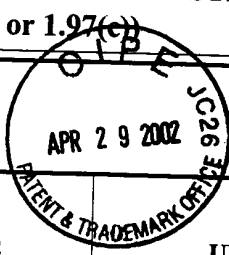
In Re Application Of: **Heikki Heikkila, et al.**

Serial No.  
10/046,967

Filing Date  
January 14, 2002

Examiner  
UNASSIGNED

Group Art Unit  
1731



RECEIVED  
MAY 2 2002  
TC 1700

Title: **PREPARATION OF CHEMICAL PULP AND XYLOSE, UTILIZING A DIRECT ACID HYDROLYSIS ON THE PULP**

Address to:  
Assistant Commissioner for Patents  
Washington, D.C. 20231

**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or before the mailing date of a first Office Action on the merits, whichever event occurs last.

**37 CFR 1.97(c)**

2. ☐ The Information Disclosure Statement submitted herewith is being filed after three months of the filing of a national application, or the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or after the mailing date of a first Office Action on the merits, whichever occurred last but before the mailing date of either:

1. a Final Action under 37 CFR 1.113, or
  2. a Notice of Allowance under 37 CFR 1.311,
- whichever occurs first.

Also submitted herewith is:

- ☐ a certification as specified in 37 CFR 1.97(e);

**OR**

- ☐ the fee set forth in 37 CFR 1.17(p) for submission of an Information Disclosure Statement under 37 CFR 1.97(c).

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**Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. **19-1013/SSMP** as described below. A duplicate copy of this sheet is enclosed.
- ☐ Charge the amount of \_\_\_\_\_
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.

**Certificate of Transmission by Facsimile\***

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. \_\_\_\_\_) on \_\_\_\_\_ (Date)

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Signature

\_\_\_\_\_  
Typed or Printed Name of Person Signing Certificate

\*This certificate may only be used if paying by deposit account.

**Certificate of Mailing by First Class Mail**

I certify that this document and fee is being deposited on **April 22, 2002** with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

\_\_\_\_\_  
Signature of Person Mailing Correspondence

**Mishelle Mustafa**  
Typed or Printed Name of Person Mailing Correspondence

Dated: **April 22, 2002**

**Edward W. Grolz**  
Registration No.: 33,705

**Scully, Scott, Murphy & Presser**  
400 Garden City Plaza  
Garden City, NY 11530  
(516) 742-4343

CC:



1731  
PATENTS

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicant(s):** Heikki Heikkila, et al.

**Examiner:** UNASSIGNED

**Serial No:** 10/046,967

**Art Unit:** 1731

**Filed:** January 14, 2002

**Docket:** 15201

**For:** PREPARATION OF CHEMICAL  
PULP AND XYLOSE, UTILIZING  
A DIRECT ACID HYDROLYSIS  
ON THE PULP

**Dated:** April 22, 2002

Assistant Commissioner for Patents  
Washington, D.C. 20231

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TC 1700

**INFORMATION DISCLOSURE STATEMENT**  
**PURSUANT TO 37 C.F.R. §§1.56, 1.97 and 1.98**

Sir:

Applicants, in order to meet their duty of disclosure, set forth at 37 C.F.R. §1.56, submit herewith those references which they deem relevant to the claims of the present application.

The relevant references are as follows:

1. Finnish Patent No. 55516 (to Kemi Oy)

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**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on April 22, 2002.

Dated: April 22, 2002

  
Mishelle Mustafa

2. Paice, M.G. and Jurasek, L., "Removing Hemicellulose From Pulps by Specific Enzymic Hydrolysis", J. Wood Chem. And Tech., 4(2), pp. 187-198 (1984)

3. WO 98/56958 (to Xyrofin Oy)

4. Guangyu, Yao et al., "Production of Pulp and Recovery of Xylose from Hardwood. II. The Optimal Process Conditions for Prehydrolysis of Eucalyptu Citriodora Chips with Dilute Sulphuric Acid and Sulfate Pulping", Journal of Nanjing Technological College of Forest Products, No. 4, p.32 (1988)

5. U.S. Patent No. 4,734,162 (to Ampulski)

6. STN International, file CAPLUS, CAPLUS accession no. 1980:550586, Document no. 93:150586, Kramar, Alojz et al., "Pentoses from beech bark"; and Czech. CS 181485 19800115, 3 pp.

7. U.S. Patent No. 3,954,497 (to Friese)

8. U.S. Patent No. 4,008,285 (to Melaja et al.)

9. U.S. Patent No. 4,070,232 (to Funk)

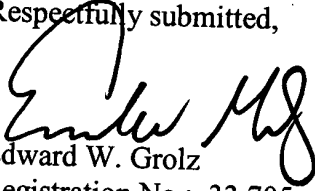
It is noted that in the case of Finnish Patent No. 55516, the significance of the reference is discussed in the subject specification. With respect to the second cited reference above, an English abstract follows the copy of the reference. The significance of this reference is also discussed in the subject specification. It is noted that the remaining patent publications and abstract are in English. Finally, a copy of the corresponding International Search Report is enclosed, citing references 3 and 5-9.

Applicants respectfully request that the above-mentioned references be made of record in the file of the present application. To that end, applicants submit herewith the aforementioned references and the completed Form PTO-1449, setting forth these references.

Applicants submit that the filing of this Information Disclosure Statement is prior to the issuance of an Office Action on the merits. Therefore, no Declaration or fee is required to effect the filing of this Information Disclosure Statement.

Consideration of this Information Disclosure Statement is respectfully requested, since the information provided herein may be material to the patentability of the subject application as defined in 37 C.F.R. §1.56.

Respectfully submitted,



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Registration No.: 33,705

Scully, Scott, Murphy & Presser  
400 Garden City Plaza  
Garden City, New York 11530  
(516) 742-4343

EWG/nd

**LIST OF PRIOR ART  
CITED BY APPLICANT**

(Use several sheets if necessary)



**Atty. Docket No.**  
15201

**Serial No.**  
10/046,967

**Applicant**  
Heikki Heikkila, et al.

**Filing Date**  
January 14, 2002

**Group**  
Unassigned

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**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL*		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (if appropriate)
	AA	4,734,162	03/29/88	Ampulski			
	AB	3,954,497	05/04/76	Friese			
	AC	4,008,285	02/15/77	Melaja, et al.			
	AD	4,070,232	01/24/78	Funk			
	AE						
	AF						
	AG						

		Foreign Document Number	Date	Country	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
		55516	08/10/79	Finland				
		WO 98/56958	12/17/98	PCT				X
							X	

**OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

		Paice, M.G. and Jurasek, L., "Removing Hemicellulose From Pulps by Specific Enzymic Hydrolysis", <u>J. Wood Chem. And Tech.</u> , 4(2), pp. 187-198 (1984)
		Guangyu, Yao et al., "Production of Pulp and Recovery of Xylose from Hardwood. II. The Optimal Process Conditions for Prehydrolysis of Eucalyptu Citriodora Chips with Dilute Sulphuric Acid and Sulfate Pulpig", <u>Journal of Nanjing Technological College of Forest Products</u> , No. 4, p. 32 (1988)
		STN International, file CAPLUS, CAPLUS accession no. 1980:550586, Document no. 93:150586, Kramar, Alojz et al., "Pentoses from beech bark"; and Czech. CS 181485 19800115, 3pp.

**EXAMINER**

**DATE CONSIDERED**

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 00/09645

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C13K 13/00, D21H 11/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C13K, D21H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4734162 A (AMPULSKI, ROBERT R.), 29 March 1988 (29.03.88)	1-27
	--	
X	WO 9856958 A1 (XYROFIN OY), 17 December 1988 (17.12.88)	1-27
	--	
X	STN International, file CAPLUS, CAPLUS accession no. 1980:550586, Document no. 93:150586, Kramar, Alojz et al: "Pentoses from beech bark"; & Czech. CS 181485 19800115, 3 pp.	1
	--	

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

10 November 2000

Date of mailing of the international search report

16 -11- 2000

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Swedish Patent Office

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 00/00645

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3954497 A (FRIESE, HERMANN), 4 May 1976 (04.05.76)	23,25,26
A	--	1-27
X	US 4008285 A (MELAJA, ASKO J. ET AL), 15 February 1977 (15.02.77)	23,25,26
A	--	1-27
A	US 4070232 A (FUNK, HARALD F.), 24 February 1978 (24.02.78)	1-27
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